



## NABT Position Statement

### Sustainability in Life Science Teaching

#### Introduction

Sustainability can be defined as the responsible use of resources over an indefinite period of time or as “Meeting our own needs without limiting the ability of future generations to meet their needs” (World Commission on Environment and Development, 1987). Responsible resource use has become increasingly important as the human population continues to grow and consume natural resources at unprecedented rates. Recently, more than 1000 of the world’s leading scientists reported that:

*Humans have changed ecosystems more rapidly and extensively in the last 50 years than in any comparable period of time in human history, largely to meet growing demands for food, fresh water, timber, fiber, and fuel. ... This has resulted in a substantial and largely irreversible loss in the diversity of life on Earth. ...*

—Millennium Ecosystem Assessment Synthesis Report, 2005

#### Position

The National Association of Biology Teachers recognizes that humans impact the natural world. Humans depend on natural systems and the resources they provide, and as an organization of educators devoted to the study of life and that which supports it, the National Association of Biology Teachers promotes the teaching of sustainable themes to thoughtfully address the world’s most pressing problems.

#### Recommendations

- Efforts should be made to get students outdoors whenever possible. Classes and investigations should be held outdoors and lessons should promote the study of natural systems such as rivers, lakes, forests, and oceans and the challenges facing these ecosystems.
- Lessons should allow students to express individual leadership and civic action, which promotes long-term visionary thinking and encourages equity, social justice, peace, health and healing.
- Topics on renewable energy, energy from the sun and wind, and other renewable resources should be introduced.
- Schools should make a substantive and demonstrated effort to recycle and conserve energy, water, and other natural resources.

- Educators should follow principles and guidance set forth by organizations devoted to the teaching and practice of sustainable living (e.g., Association for the Advancement of Sustainable Living in Higher Education).
- Include speakers and special programs in curriculum, especially those featuring noted authorities on population control and resource conservation.

**Curriculum should:**

- focus on sustainability as a well-integrated topic
- address issues of population and consumption
- feature interdisciplinary principles, promoting meaningful dialog and problem solving across disciplines (UNESCO, 2003)
- encourage cooperative and coordinated efforts with neighboring schools and universities
- explore how school communities work, including water and energy use, CO<sub>2</sub> produced per student, amount of materials procured, amount of materials recycled, amount of locally-grown food served, amount of meals derived from organisms lower on the food chain, amount of food waste composted, amount of waste generated, amount of food waste composted, etc. (Lyons, 2000; Orr, 1994)
- promote discussion of environmental and other social issues.

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**Additional Resources**

- Literature

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- Web Resources
  - Association for the Advancement of Sustainability in Higher Education. Online at: <http://www.aashe.org/>.